SPECIFICATION

INSTALLATION PRACTICE FOR LMT™ LINED MAIN TAP SADDLE KIT OR LMK MAIN TAP SADDLE KIT THROUGH EXCAVATION PIT

#1656 V.1 3/16 (16-03-509)

LMT Lined Main Tap or LMK Main Tap Saddle Kit Installation Specification

1.0 INTENT

1.1 It is the intent of this specification to provide a cost effective installation of a sewer lateral tap to a rehabilitated mainline pipe with lining or to a mainline pipe.

1.2 This specification takes precedence over any other similar specification that may be found in other sections of the bid documents.

2.0 GENERAL

2.1 The lateral service connection for the LMT Lined Main Tap or LMK Main Tap saddle installation system is located within the mainline pipe by the most effective means available to the installer. The most common method utilized and associated with this system consists of inserting a video camera with an internal sonde either through the lateral service and pushing the camera to the mainline pipe or from main pipe to the service location. Locating the service location is achieved with a receiving unit and marked on the surface.

2.2 Once the service connection has been located an entry pit will be made by conventional excavation or, if the installation is a vertical TEE configuration, by creating a bore hole approximately thirty-inches in diameter by vacuum excavation.

2.3 The surface crown of the pipe shall be cleaned with high pressure water leaving the surface free of debris.

2.3.1 If LMT saddle is going to be installed to a CIPP lining, the original host pipe will be broken away from the lining around the entire circumference of the lining and beyond the saddle length by 2 inches on each side. Care must be taken not to damage the CIPP lining inside the host pipe.

2.3.2 If the LMK saddle is going to be installed onto a host pipe, the pipe must be clean and free of debris in all areas that the saddle will make contact with the pipe.

2.3.3 If new lateral service connection, the saddle shall be placed on the lining or host pipe and the opening marked for the location of the service line. The saddle is removed and the service opening will be cut into the lining or host pipe.

2.4 A length measurement will be taken for the new section of service lateral pipe. The lateral service pipe will be prepped and primed.

2.4.1 The saddle riser shall be connected to the new section of PVC pipe (4” or 6” SDR 26 or SDR 35) utilizing a solvent weld or a push gasket joint.

2.5 The LMK proprietary adhesive/sealant will be applied to the underside of the saddle. The adhesive shall be smoothed out with the supplied applicator stick. (For HDPE pipe, a special 2-part Epoxy adhesive must be used.)

2.6 The saddle/PVC pipe assembly will be snapped onto the exposed CIPP Lining or directly to the host pipe.

2.6.1 The saddle is attached to the host pipe encompassing more than fifty percent (50%) of the pipe diameter. The LMT™ saddle shall be a self-supporting component, which allows the resin to cure without affecting the integrity of the seal to the host pipe.

2.6.2 Two quick bands (four total) that are provided in the kit shall be attached to each end of the saddle around the circumference of the pipe to ensure no slippage during the curing process or during backfilling while the adhesive completely cures.
2.6.3 Once secure, the adhesive will be smoothed out around the new service opening and the host lining or pipe ensuring an optimal finished product.

2.7 The new PVC lateral service pipe shall be connected to the existing lateral pipe using a non-shear leak-free coupling.

2.8 The saddle fitting and host pipe will be properly bedded and the pit or bore hole back filled. The site will be restored according to engineering specifications.

2.9 The process shall be LMT™ (LINED MAIN TAP) or LMK Main Tap Saddle System by LMK® Technologies or equal.

2.10 Lateral service flow can be immediately resumed.

3.0 MATERIAL

3.1 The LMT or LMK Saddle Kit consists of one Type 1 SCH 40 PVC Saddle, the appropriate amount of adhesive tubes for the saddle size, four appropriately sized Quick Bands, and adhesive applicator stick.

3.1.1 The saddle is sized to surround the liner or pipe beyond the spring line, which creates a clamping effect that draws the saddle firmly on to the liner or the pipe.
3.1.2 The universal LMK Adhesive bonds the saddle to the liner or host pipe, providing a flexible non-leaking main/ lateral connection. A special two part adhesive is available for HDPE liners/pipes.
3.1.3 The saddle is compatible with a variety of lining materials including CIPP and fold and form liners.
3.1.4 The saddle is also compatible with a variety of pipes including cast iron, vitrified clay, concrete, PVC and HDPE.
3.1.5 A variety of saddle sizes are available - for pipes ranging from 6 inch to 24 inch.
3.1.6 Many saddle sizes are stocked but not all; contact LMK customer service for availability.

4.0 INSTALLATION RECOMMENDATIONS

4.1 Safety – all proper personal protective equipment and traffic control shall be utilized.

4.2 Access Safety - Prior to entering access areas such as manholes, an excavation pit, performing inspection or cleaning operations, an evaluation of the atmosphere to determine the presence of toxic or flammable vapors or lack of oxygen shall be undertaken in accordance with local, state, or federal safety regulations.

4.3 Cleaning and Inspection - As per NASSCO Standards.

4.4 Plugging – Lateral line plugging may be required. When required, the main pipe flow will be by-passed. The pumping system shall be sized for peak flow conditions. The upstream manhole shall be monitored at all times and an emergency deflating system will be incorporated so that the plugs may be removed at any time without requiring confined space entry.

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5.0 FINAL ACCEPTANCE

5.0 Upon completion, the installer will deliver an internal CCTV video of the main/lateral connection to the owner. The owners will review the documentation and the site to determine that the scope of work is complete and the work is satisfactory.

– END OF SECTION –